volksthümlicher Erzählungskunst. Nicht fünf Verse könnte man daraus ausscheiden, ohne das Ganze zu schädigen. Solche Schöpfungen eines urwüchsigen Volksgeistes gehören, ebenso wie die Homerischen Gesänge und das Nibelungenlied, der Weltliteratur an.

Ausser den 60,000 Versen meiner Sammlung erlangte die Gesellschaft von Herrn Prof. Miroslav Alačević in Spalato eine ungedruckte Sammlung dalmatinischer epischer Volkslieder. Diese Sammlung zählt über 30,000 Verse. Ferner sind uns noch von anderen Correspondenten von allen Seiten des slavischen Südens über 50,000 Verse, nebst zahlreichen anderen Beiträgen zur Volkskunde eingeschickt worden, so dass wir mit gerechtem Stolze behaupten dürfen, dass durch die Verarbeitung und Veröffentlichung dieses gewaltigen Stoffes das Südslaventhum in ethnographischer Hinsicht endlich auch eine der neuen Wissenschaft würdige Beleuchtung erfahren wird. Das kann dann, als das endgiltige Ergebniss meiner Reise gelten.

Catalogue of the Species of Batrachians and Reptiles contained in a collection made at Pebas, Upper Amazon, by John Hauxwell. By E. D. Cope.

(Read before the American Philosophical Society, October 2, 1885.)

The contents of a previous collection made at Pebas by Mr. Hauxwell are enumerated in the Proceedings of the American Philosophical Society for 1870, page 553. It included ten species of batrachians, four of lizards, and nine of snakes. The present collection embraces six species of batrachians, eleven of lizards, and fifteen species of snakes. The total number of species obtained is, fifteen batrachians, fourteen lizards, and twenty-three species of snakes. A considerable collection was made in the same region by the late Professor Orton, and the species are enumerated and described in the Journal of the Philadelphia Acadamy of 1875, p. 159. A previous collection, made by Professor Orton, is described in the Proceedings of the Philadelphia Academy for 1868, and one from Western and Central Peru is reported on in the Proceedings of the American Philosophical Society for 1877. These collections form the basis of a general review of the herpetology of Peru, which the writer hopes to publish with illustrations at no distant day.*

*Some species were obtained in the same region by Prof. Steere of Ann Arbor, Mich., and my thanks are due to this gentleman for the opportunity of examining them. From near Tarapota come the following species: Dendrobates trivittatus Spix; Leptodactylus pacilochilus Cope; Neusticurus ceplcopus Cope; Polychrus marmoratus L. From Tombez: Bufo hamaliticus Cope; Hyla phaota Cope.

From the Mamoré River in Eastern Bolivia, Dr. E. R. Heath presented to the museum of Ann Arbor the following species: 1. *Amphisbæna alba L.*; 2. *Pseu-doëryx mimeticus* sp. nov. The genus Pseudoëryx Tseh., 1826, is the *Hydrops* Wagler, 1830, and *Dimades* Gray, 1843. It includes two banded species, the present

BATRACHIA.

HYLA FAVOSA, sp. nov.

The internal nares are about as large as the choang, and are a little longer than wide. The patches of vomerine teeth are between them, opposite a point anterior to their middle. The head is short and wide, and the canthus rostralis is rounded and concave. The muzzle is truncate viewed in profile, and the nostrils, though opening laterally, are terminal in position. The tympanum is small, being one-half the long diameter of the eye-slit, or a little less than half that of the eyeball. It is a little larger than the digital palettes of the anterior foot. On all the upper surfaces the skin is smooth. The usual areolation covers the abdomen and part of the femora. The three external fingers are about half webbed, the web not reaching the palettes of the third and fifth digits. The toes are more than half webbed, the membrane reaching the dilatations of all the toes except the fourth, where it reaches the base of the penultimate phalange. When the posterior limb is extended, the heel reaches the front border of the orbit. The upper arm is bound to the side for the greater part of its length by a strong extension of the skin. A trace only is seen at the anterior base of the femur.

one and the P. plicatilis Linn., and two ringed species, the P. martii Spix and P. callostictus Gthr. The P. mimeticus has a remarkable resemblance to the Hydrocalamus quinquevittatus (D. & B.) Cope, Proceeds. Amer. Philos. Soc., 1884, p. 176. The scuta of the head are as in the P. plicatilis. Dorsal region brown for a width of five and two half rows of scales. Sides, on the third and fourth and half of the second and fifth rows, marked with a black band, which extends from the orbit to end of the tail, and is yellow-bordered above. Below yellow with two small brown spots on each gastrostege and one on each urostege. Lips black, yellow spotted; a yellow band from eye to angle of mouth. A few small blackish spots on top of muzzle. Gastrosteges 163; anal 1-1; urosteges 35. Total length M. .490; of tail .056. 3. Liophis almadensis Wagl. 4. Herpetodryas fuscus Linn. 5. Xenodon bipræoculis, sp. nov. Body much compressed, and scales in nineteen longitudinal rows, and scarcely alternating. Anal plate entire. Eye large, profile convex. Superior labials eight, fourth and fifth entering orbit; seventh very wide above. Oculars 2-2, the anterior narrow, permitting the posterior angle of the large loreal to almost reach the orbit. Temporals 1-3; the anterior as deep as long. Both internasals and prefrontals a little wider than long. Frontal large, wide in front, longer than common suture of parietals. Parietals as wide as long. Ten inferior labials, the sixth much the largest. Geneials very short, the anterior a little the longer. Gastrosteges, 136; urosteges, 44. Color above olivaceous with three rows of equidistant spots. These are composed of coarse, black punctulations, and are without definite outline. Every third spot of the median line is in the centre of a pale ground, while the pairs between are connected by a dark shade. Inferior surfaces yellow; every other, or every second gastrostege, with a blackish edging at each end. Top of head olive, with black punctulations symmetrically arranged, so as to leave a curved unspotted space between the orbits and on the external border of the parietals. Labial plates unspotted. A very narrow black line from eye to superior border of last labial. Total length M. .590; of tall, .101. From its compressed form and natural coil, this species might be supposed to have arboreal habits. It agrees with three other species in its entire anal plate; vis., X. suspectus Cope; X. cotubrinus Günth; and X. angustirostris Pet. In X. rhabdocephalus Boie, I find the anal plate entire or divided. 6. Elaps surinamensis Cuv.

The color of the upper surface is a brown, which is interrupted by a coarse honeycomb or net-like pattern of a bright yellow color. The inclosed spaces are as large or larger than the eye, excepting on the sides of the head and body and on the forelimbs, where they are smaller. They are distinct on the external two digits on both feet. The posterior faces of the femur, with all the inferior surfaces are uniform brown. The eyelids are of a paler brown, but whether this is due to the condition of the specimen or not, is uncertain.

Measurements.

Length of head and body	
Length to line connecting posterior borders of tympana010	
Width of head at do	
17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,
Length of fore limb	3
" " foot	
" " hind limb	
" tibia	
" posterior foot	
" " astragalus	

This species belongs to the same type as the *Hyla leucophyllata*. Its coloration is unique in the genus. An allied species or subspecies has been brought from the Purus river, Brazil, by Prof. Steere, of Ann Arbor, Mich. It agrees in all respects with the *H. favosa*, but the heel reaches the end of the muzzle, and the color of the superior surfaces differs. The yellow covers the dorsal region, an imperfect reticulate pattern being only visible on the sides of the head and body.

HYLA MARMORATA Daud.

PITHECOPUS TOMOPTERNUS Cope.

CERATOPHRYS DORSATA Wied.

DENDROBATES TINCTORIUS Schn.

DENDROBATES TRIVITTATUS Spix.

LACERTILIA.

MABUIA AGILIS Raddi.

MIONYX PARIETALIS Cope, gen. et sp. nov.

In his monograph of the Ecpleopodine division of the Teidæ, Professor Peters referred the known species to five genera, three of which were divided into subgenera. The definitions of most of these groups were derived from the pholidosis, the exception being Iphisa (Gray), which was defined by the lack of claws on the pollices. I am of the opinion that Professor Peters was not fortunate in his selection of the pholidosis as the basis of generic and subgeneric divisions. Although such a system may associate species which agree in general appearance, and hence be thought by some to be "natural," it is certain that the various forms of scales pass into each other by such gradations, as to be unavailable for the

characterization of tangible divisions. On the other hand, Professor Peters quite overlooked important characters of the squamation of the head, such as are usually found to distinguish natural genera in other families, including them only in his descriptions of the species. I propose to give a synopsis of the genera of this group as they appear to me. One result is a considerable reduction in the number of names. Agreeing with Dr. Boulenger that these species do not form a family distinct from the Teide, I define them as a group in that family with the nostril pierced in a single plate.

I. "Thumbs without claws."

A series of scuta on the nape; frontonasal and frontoparietal scuta present.

Iphisa Gray.

II. Claws all straight, conic.

No nucleal scuta; frontoparietals and frontonasals present.. Mionyx Cope.

III. Claws curved, present on all digits.

a. Dorsal series of large scuta.

Scuta continuous, transverse; frontonasal and frontoparietal scuta......

Placosoma Tsch.

aa. No larger series of dorsal scuta.

In the above arrangement there is included, under Iphisa, Perodactylus R. & L. Leposoma includes nearly all the reputed genera of Peters and other authors, viz: Loxopholis Cope: Cercosaura Wagl.; Pantodactylus D. & B.; Ecpleopus D. & B.; Aspidolamnus Pet.; Euspondylus Tsch.; Argalia Gray (Peters); Chalcidolepis Cope; Xestosaurus Pet.; and Pristidactylus O'Sh. Proctoporus Tsch. includes Pholidobolus Pet., Oreosaurus Pet., and species referred to Ecpleopus by O'Shaughnessy. Of the species referred to the group Leposoma, as originally restricted, but two have the abdominal scuta acute posteriorly, viz: the L. scincoides Spix, and the L. carinicaudatum Cope. The other species referred by O'Shaughnessy and Peters to that group have, according to them, the abdominal scuta truncate posteriorly, and must hence be referred to the group Loxopholis Cope, of which L. rugiceps Cope is type. These are the L. dispar Peters, and L. buckleyi O'Sh. The species thus arranged will be as follows:

Mionyx parietalis Cope.

Iphisa elegans Gray.

" modesta R. & L.
Neusticurus bicarinatus L.

" ecpleopus Cope.

Placosoma cordylinum Tsch. Leposoma scincoides Spix. Leposoma carinicaudatum Cope.

" rugiceps Cope.

" dispar Pet.

" buckleyi O'Sh.
" occllatum Wagl.

" humile Pet.

" olivaceum Gray.

PROC. AMER. PHILOS. SOC. XXIII. 121. M. PRINTED NOVEMBER 7, 1885.

 \mathcal{L}

Leposoma	reticulatum O'Sh.		Leposoma	guentheri O'Sh.
4.6	picticeps Cope.			olivaceum Gray.
	vertebrale O'Sh.			marmoratum Gray.
	schreibersii Wiegm.		4.6	pæcilochilus L. & Von M.
"	bivittatum Cope.			metallicum Cope.
6.6	concolor Tsch.		66	bogotense Pet.
6.6	argulus Pet.		Proctopor	us pachyurus Tseh.
6.6	gaudichaudi D. & B.		· ·	unicolor Gray.
4.6	affinis Pet.		"	fraseri O'Sh.
**	maculatum Tsch.		**	oculatus O'Sh.
11	rhombiferum Gthr.		"	montium Peters.
44	acutirostre Pet.			striatus Pet.
4.6	ocellatum Gray.	*		luctuosus Pet.
6.6	strangulatum Cope.		Emphrass	siotis simoterus O'Sh.

The species number as follows:

fionyx	1
phisa	
Veustieurus	
Plaeosoma	
eposoma	
Proetoporus	
Emphrassiotis	
Total	42

The characters of the genus Mionyx are the following: First toe of both anterior and posterior extremities with rudimental straight claw; claws of other digits small, straight and conic. Prefrontal and fronto-parietal plates present and distinct from each other. Ear-drum exposed. No distinct collar. Femoral pores present. Pholidosis squamous, nearly homogeneous.

Char. specif. These resemble those of the group Leposoma within that genus. The scales are imbricate and keeled, with acute posterior borders above and below. When the epidermis is lost the inferior scales are nearly truncate.* The dorsal and ventral scales are subequal and form twenty-one transverse series between the anterior and posterior limbs, across the back. Behind the auricular meatus, and in the axilla, they are coarsely granular. The upper and lower arms are covered with large keeled scales, although those of the posterior side of the former are smaller than those on the anterior side. The hind leg is similarly surrounded by large keeled scales, excepting on a band on the posterior side of the femur where they are granular.

There is a transparent disk of the lower eyelid, which is covered by two scales. The plates of the head are smooth. There is a loreal plate

^{*} The truncation of the abdominal scales in the L, rugiceps is seen in the epidermis as well as the true skin.

which is higher than long, and projects at an angle between two preoculars. Of these the superior is large and extends partly over the eye, leaving only three narrow superciliaries. There are four well-developed supraorbitals. The large internasal is about as wide as long. The frontonasals are well in contact by suture. The frontal is considerably longer than wide, as are also the frontoparietals. The interparietal is large, as wide as long, and would be a regular hexagon, but that the posterior border is rounded. The parietals are much smaller and trapezoidal, and longer than wide. No occipitals. Temporals small, squamous. Superior labials seven, separated from the orbit by a row of narrow suborbital scales. Inferior labials five. A symphyseal and an undivided postsymphyseal. Four infralabials, of which the first two are in contact, and the last two separated by flat scales, the fourth truncate posteriorly; no distinct pectoral scales.

The limbs are slender; when pressed to the side, the fingers reach to the middle of the tibia, and the toes to a little beyond the elbow. The toes themselves are weak and slender. The first digit is rudimental, and the second and fifth are very short, and of subequal length on the fore foot; and on the posterior foot, the second is a little the longer. The third digit is shorter than the fourth on both feet. They are all protected by a single row of flat scales below. The femoral pores extend entirely across in front of the anal scuta; there are ten on each side of the middle line. Of anal scuta there are six, arranged as follows: Two small ones on the middle line, one of which is marginal, and the other anterior to it; one large one on each side of these, also marginal; and a small one on the external side of these, also marginal.

Color, brown; dark above, pale below, darkest on the sides. The exact color is probably lost, as the specimen is not in the best condition. Side of head with some yellow spots. Lips and throat white, the former with a dark brown spot on some of the labial scuta.

			Measurements.	M.
Length	from	muzzl	le to vent	.032
	6.6		to axilla	
6.6	6.6	66	to auricular meatus	.0075
Width	at aur	icular	meatus	.005
Length	of fo	re liml	b	.0105
" "	" ha	nd		.0035
Length	of hi	nd lim	b	.0145
66	" tik	ia		.0048
"	" foo	ot		.0056

LEPOSOMA PICTICEPS, sp. nov.

Dorsal scales very narrow, in regular cross-series, the acute extremities of those of one row alternating with those of the rows in front and posterior; each with a strong epidermal keel which is represented by a weak one of the true skin. These scales commence at the interparietal plate,

and present nine transverse series to the axilla, and twenty from the axilla to the groin. The scales of the tail are similar. The abdominal scales are smooth and parallelogrammic, being truncate behind, and are in sixteen transverse rows between the axilla and groin. A rather wide space posterior to the auricular meatus, and posterior to the axilla is covered with granular scales. The larger and square scales of the throat are in four transverse rows of two scales each. They are separated from the cross-row that marks the axilla by two cross-rows, and are bounded by some flat scales in front and at the sides.

The internasal plate is a little wider than long. The frontonasals are well in contact. The frontal is longer than wide. The frontoparietals are as wide as long, and are regularly five-sided, the supraorbital side a little longer than the others. The interparietal is nearly three times as long as wide. The parietals are larger and their posterior border forms, with that of the interparietal, a straight line. The posterior exterior border is excavated. The loreal is higher than long, and presents an obtuse angle posteriorly between the two preoculars. Of these the superior extends posteriorly over the eye, leaving three narrow superciliaries. Three supraoculars, the posterior with a small round plate posterior to it. Temporal scales rather large, smooth; no free marginal meatal scales. Seven superior labials; six inferiors. A short symphyseal and a long postsymphyseal, both undivided. Posterior to the latter two pairs of large infralabials, touching on the middle line, followed by a large pair of infralabials which are separated on the middle line, each of which is followed by two large and some smaller scales.

Limbs rather short, posterior feet elongate. The fingers reach to the heel when both limbs are pressed to the side of the body, and the toes to the middle of the humerus. The limbs are covered by large, smooth scales, except on the posterior faces of the humerus and tibia, where they are smaller, and on the posterior face of the femur where they are granular. The claws are present on all the digits and are curved. Second and fifth fingers equal. Second toe longer than fifth, and fourth a good deal longer than third. Seven femoral pores and two preanals on each side. Preanal plates, seven. Of these six are marginal, a large one with a small one on each side of it, on each side of the middle line. The seventh is in front of the two median marginals, and is a large triangle.

Color, olive-brown or grayish, shaded with blackish on the head. The plates of the head have pale borders and centres, and the rostral and labial plates are yellow, the latter with a dark brown spot in the centre. A light (? yellow) band over the eye, and two rows of similar spots on the temporal region. Several rows of similar dark-edged spots on the nape. Granular region black, with yellow spots. The spots fade out on the dorsal region, each cross-row of scales has a blackish edge. On the tail two rows of such spots can be made out on each side. Inferior surfaces pale, probably yellow; lower labials, and the posterior infralabials with a dark brown spot in the centre.

				Measurements.	I.
Length	h from	muzzl	e to v	vent)57
				axilla	
6.6	" "	46	" 8	auricular meatus)12
Width	at aui	icular	meat	tus	076
Length	h of fo	re limb)15
"	" ha	nd			0065
6.6	" hi	nd lim	b		026
6 6	" til	ia			007
6.4	" for	ot			132

This species is evidently nearly related to the *Leposoma reticulatum* of O'Shaughnessy (*Cercosaura reticulata* O'Sh., Proceedings Zoöl. Society London, 1881, p. 230). It differs in not possessing the following characters of that species, as described and figured. In *L. reticulatum* there are two parietal plates on each side; abdominal scales are rounded in posterior outline, and in only eight rows, while they are in ten in *L. picticeps*; in having an azygous marginal anal instead of two, and in having a stripe on the body, and the tail differently colored from the back. The type of *L. picticeps* is a considerably larger animal than that of the *L. reticulatum*.

Centropyx dorsalis Gthr. Monoplocus dorsalis Günth. Centropyx pelviceps Cope.

Mr. O'Shaughnessy finds these supposed species to be identical. Dr. Günther having established a new genus (Monoplocus) for the species on the supposed absence of femoral pores, I did not think it worth while to compare my specimens, in which they are numerous, with the one described by Dr. Günther. Mr. O'Shaughnessy has discovered that Günther's type possesses the pores.

AMIVA SURINAMENSIS Gray.

HYPSIBATUS AGAMOIDES Spix.

HYPERANODON PELTIGERUS Cope.

ENYALIUS LATICEPS Guich.

Anolis Buckleyi O'Sh.

Anolis Bouvieri Boc. O'Sh.

Anolis macropus, sp. nov.

Tail subround, without crest. Ventral scales small, smooth; dorsal scales minute, rough. Occipital scale small, well separated from supraorbitals; the latter separated from each other by three rows of scales, and not continued as a larger row anterior to orbit. Interorbital region concave; facial rugæ obtuse, separated by a concavity. Facial scales small, keeled, about twenty longitudinal rows at the middle of the muzzle, and ten in the facial concavity. No distinct canthus rostralis, and but two canthal scales distinguishable from those of the muzzle in size. Supraocular disk embracing a dozen scales of unequal sizes, and

surrounded by granules. Seven or eight loreal rows; labials, $\frac{9}{10}$; infralabials all small. Aurieular meatus small, but larger than occipital scale. The limbs are slender and long. The anterior appressed reaches the end of the muzzle by the end of the fifth digit; the posterior reaches the same by the end of the fourth digit. Digital dilatations narrow. Fan small.

The general color is blackish, below white, the line of junction of the colors on the sides of the belly, and ragged. A pale line across the chin.

Measurements.								
Length of head and body	.045							
" to posterior border of meatus auditorius	.061							
Width at posterior border of meatus auditorius	.0065							
Length of fore leg								
" " fore foot								
" " hind leg	.041							
" " tibia								
" " hind foot	.017							

This species approaches most closely the A. limifrons Cope from Veragua. In that species the facial ruge have distinct large scales, which are wanting in the A. macropus, and the hinder legs are not so long. The facial scales are a good deal smaller, and the posterior legs shorter in A. macropus than in the A. trachyderma, which it otherwise resembles. The long hind legs distinguish it from other allied species.

OPHIDIA.

Typhlops reticulatus L. Boa constrictor L.

Rhabdosoma Brevifrenum Jan.

RHABDOSOMA MICRORHYNCHUM Cope.

CONTIA SERRATA, Sp. nov.

Rhadinæa nicaga Cope, *Lygophis nicagus* Cope, Proceeds. Phila. Academy, 1868, p. 132. Proceeds. Amer. Philosoph. Soc., 1870, p. 553.

Scales in seventeen rows, without fossæ, all of moderate width, the first not very wide. Eight superior labials, third, fourth and fifth entering orbit; fifth, sixth and seventh largest, subequal, their superior borders increasing in length in the order named. Rostral plate very small, barely visible from above. Nasal decurved forwards, deeper posteriorly; loreal deeper than long; ocular 1-2; the preocular narrow and widely separated from the frontal above. Temporals 1-2; the anterior in contact with the inferior postocular only. Internasals small, as wide as long; prefrontals much larger, wider than long. Frontal elongate, truncate in front, and with parallel sides; parietals long and large, extending on each side to the inferior postocular. Gastrosteges 160; anal divided; urosteges 52. Total length, M. .245; to rictus oris, .0065; of tail, .070.

Color above dark brownish-gray. A line of darker color extends along the third row of scales, and a similar one on the eighth row, which leaves the ninth or median row of the ground color. These lines are quite indistinct. Ends of the gastrosteges of the ground color, shaded with bluish, so as to give the color border a serrate outline. Under surface of body and tail yellow, immaculate. Top of head paler. The frontal plate with dark edges and some dark specks on the prefrontals. A pair of light dark-edged small spots, close together, one on each side of the common parietal suture. Superior labial dark-edged. Lower labials and adjacent plates obscurely speckled.

Near the head the dorsal lines unite and form a serrate dorsal band, which is separated by a paler band from a darker lateral band with the superior edges serrate; but these markings are obscure. In another specimen which Prof. Steere, of Ann Arbor, brought from the Purus river,* the dorsal band is more distinct and extends to the end of the tail.

I originally referred this species to (Lygophis) Aporophis, but its equal teeth exclude it from that genus.

Opheomorphus meleagris Shaw.
Helicops angulatus Linn.
Oxyrrhopus scolopax Klein.
Dipsas cenchoa L.
Riiinobothyrum lentiginosum Scop.
Leptognatiius catesbyi Weigel.
Leptopiis marginatus Cope.
Dryiopiis argenteus Daud.
Elaps lemniscatus L.
Bothrops brasilensis Latr.

* This collection was made at Canutama, a distance of six hundred miles, and at Marrahan, a distance of seven hundred miles above its mouth on the Purus river, and as the first indication of the reptile fauna of that region possesses considerable interest. It includes the following species: 1. Liophis almadensis Wagl.; 2. Rhadinæa nicaga Cope; 3. Pseudoeryx callostictus Günth (Hydrops); 4. Tortrix seytale Linn; 5. Bufo agua L.; 6. Hyla leucophyllata var. Beir; and 7. Lithodytes cinereus sp. nov. This frog has a smooth belly and free toes with truncate pallettes on all the digits. There are no cranial crests, and but slight traces of dorsolateral dermal folds. The vomerine teeth are ln J-shaped patches commencing opposite the posterior border of the choanæ, and curv-Ing inwards and backwards. Ostia pharyngea as large as choanæ. Nostril terminal. Tympanic drum round, two-thirds size of eye. Tongue oval, slightly notched behind. Head oval; muzzle truncate; lores straight, grooved; can thus rostralis distinct, straight. Heel of extended hind leg to end of muzzle. First finger longer than second. A prominent sharp metatarsal tubercle attached to base of first toe. No external tubercle. Color above gray, with pale brown markings. The most distinct of these is a cross-band between the orbits. Lower surfaces dirty-white; concealed surfaces brown. Upper lip with three yellowish spots extending from the orbit; to which two or three marks on the lower jaw correspond. Limbs faintly brown cross-banded. Length of head and body M. .053; width of head at tympana .018. Length of fore-leg .029; of hind leg .084; of hind foot .038.